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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,142	05/31/2000	Byung Cheon Lee	K-177	2704

7590 07/27/2004
Fleshner & Kim, LLP
14500 Avion Parkway
Chantilly, VA 20151

EXAMINER

HOM, SHICK C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/584,142

Applicant(s)

LEE ET AL.

Examiner

Shick C Horn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 13, 18-24, 26 and 28 is/are rejected.
- 7) ☒ Claim(s) 2-12, 14-17, 25, 27 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/5/04 have been fully considered but they are not persuasive. In page 23 lines 1-15 applicant argued that Ostman does not teach or suggest multiplexing the data having the assigned virtual path/channel information into transmission ATM cells based upon the corresponding assigned virtual path/channel information because Ostman in col. 1 lines 36-45 which recite that cell, i.e. data having information identifying the connection in an ATM network over which the cell is to travel, particularly the Virtual Path Identifier VPI and the Virtual Channel Identifier VCI clearly anticipate the data having the assigned virtual path/channel information as argued; further col. 11 lines 12-32 recite the transmitter/receiver for multiplexing and de-multiplexing the ATM cells.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 13, 18-24, 26, and 28 rejected under 35 U.S.C. 102(e) as being anticipated by Ostman et al. (6,483,838).
Regarding claim 1:

Ostman et al. disclose the apparatus for processing AAL2 supporting multiple virtual channels comprising: a transmitting

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part which assigns a corresponding virtual path/channel information of a destination to data from a plurality of AAL2 users, which multiplexes the data having the assigned virtual path/channel information into transmission ATM cells (see col. 1 lines 36-45, col. 2 lines 34-43, col. 2 line 60 to col. 3 line 6, and col. 11 lines 12-32) based upon the corresponding virtual path/channel information, and which transmits to the corresponding destination a transmission ATM cell through one of a plurality of channels corresponding to the assigned virtual path/channel information (col. 3 lines 7-49); and a receiving part which receives an ATM cell through one of the plurality of channels (see col. 2 lines 34-43, col. 2 line 60 to col. 3 line 6, and col. 3 lines 7-27), demultiplexes the received ATM cell based upon corresponding virtual path/channel information assigned to the ATM cell, and transmits the demultiplexed data to corresponding AAL2 users (col. 3 lines 50-63).

Regarding claim 13:

Ostman et al. disclose the method for processing AAL2 supporting multiple virtual channels comprising: (a1) assigning a corresponding virtual path/channel information of a destination to data from a plurality of AAL2 users, and multiplexing data having the assigned virtual path/channel information into transmission ATM cells (see col. 1 lines 36-45, col. 2 lines 34-

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43 and col. 2 line 60 to col. 3 line 6, and col. 11 lines 12-32) based upon the corresponding assigned virtual path/channel information, and transmitting to the corresponding destination a transmission ATM cell through one of a plurality of channels corresponding to the assigned virtual path/channel information (col. 3 lines 7-49); and (b1) receiving an ATM cell through one of the plurality of channels (col. 2 lines 34-43, col. 2 line 60 to col. 3 line 6, and col. 3 lines 7-27), demultiplexing the received ATM cell based upon corresponding virtual path/channel information assigned to the ATM cell, and transmitting the demultiplexed data to corresponding AAZ2 users (col. 3 lines 5-63).

Regarding claim 18:

Ostman et al. disclose the method for processing AAL2 supporting multiple virtual channels comprising: (a) multiplexing packet data transmitted from at least one AAL2 user to generate protocol data (see col. 2 lines 34-43 and col. 2 line 60 to col. 3 line 6); (b) assigning virtual channel identification information (R Tag), corresponding to a destination, to the protocol data (see col. 1 lines 36-45, col. 38 lines 10-30); and grouping together protocol data having a same virtual channel identification information before transmitting the data to the destination (see col. 11 lines 12-32); and (c) transmitting the

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protocol data through corresponding virtual channel according to the assigned virtual channel identification information (R-Tag) (col. 37 lines 4-18).

Regarding claim 26:

Ostman et al. disclose the apparatus for processing multiple virtual channels comprising: a transmitting part which assigns a corresponding virtual path/channel information of a destination to data from a plurality of AAL2 users, which multiplexes the data having the assigned virtual path/channel information into transmission ATM cells based upon the corresponding assigned virtual path/channel information (see col. 1 lines 36-45, col. 2 lines 34-43, col. 2 line 60 to col. 3 line 6, and col. 11 lines 12-32), and which transmits to the corresponding destination a transmission ATM cell through one of a plurality of channels corresponding to the assigned virtual path/channel information (col. 3 lines 7-49).

Regarding claim 28:

Ostman et al. disclose the apparatus for processing multiple virtual channels comprising: a receiving part which receives an ATM cell through one of a plurality of channels, demultiplexes the received ATM cell based upon a corresponding virtual path/channel information assigned to the ATM cell (see col. 2 lines 34-43, col. 2 line 60 to col. 3 line 6, and col. 3

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lines 7-27), and transmits the demultiplexed data to corresponding AAL2 users (col. 3 lines 50-63).

Regarding claim 19:

Ostman et al. disclose wherein in (a): assigning a header to the packet data, said header consisting CID information, LI information, UUI information, and HEC information (col. 2 lines 1-8); and assigning the virtual channel identification information (col. 1 lines 36-46) and a start field to the racket data to which the header is assigned, said start field consisting of OSJF information, a sequence number of the protocol data, and a parity bit for correcting error (col. 2 lines 22-34).

Regarding claims 20 and 24:

Ostman et al. disclose wherein a predetermined byte having identification information for identifying the virtual channels is additionally assigned to the protocol data (col. 15 lines 6-31).

Regarding claim 21:

Ostman et al. disclose wherein the predetermined byte is one-byte (col. 15 lines 6-31).

Regarding claim 22:

Ostman et al. disclose wherein in (c) transmitting the protocol data through one of a plurality buffers which are set

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corresponding to virtual channels (col. 14 line 22 to col. 15 line 63).

Regarding claim 23:

Ostman et al. disclose (d) receiving the protocol data by an ATM layer through the virtual channel (col. 2 lines 34-43, col. 2 line 60 to col. 3 line 6, and col. 3 lines 7-27); (e) demultiplexing the received protocol data to generate packet data and dividing the packet data by users or virtual channels (col. 3 lines 50-63); and (f) transmitting the packet data to an AAL2 user according to a corresponding destination (col. 3 lines 7-49).

Allowable Subject Matter

5. Claims 2-12, 14-17, 25, 27, and 29 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for formal communications;
please mark "EXPEDITED PROCEDURE")

Or:

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(for informal or draft communications, please
label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal
Park II, 2121 Crystal Drive, Arlington. VA., Sixth
Floor (Receptionist).

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Shick Hom
whose telephone number is (703) 305-4742. The examiner's
regular work schedule is Monday to Friday from 8:00 am to 5:30
pm EST and out of office on alternate Friday.

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Seema Rao, can be
reached at (703) 308-5463.

Any inquiry of a general nature or relating to the status
of this application or proceeding should be directed to the
Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

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DANG TON
PRIMARY EXAMINER

SH

July 24, 2004